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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,685	11/30/2000	John-Gy Lee	678-533 (P9005)	1390

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EXAMINER

MILORD, MARCEAU

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,685

Applicant(s)

LEE, JOHN-GY

Examiner

Marceau Milord

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5-7, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al (US Patent No 5943628) in view of McCarthy (US Patent No 5373548) and Rydbeck (US Patent No 5590417).

Regarding claim 1, Barrett et al discloses an apparatus for preventing the loss of a portable telephone (figs. 6-7; col. 1, lines 6-27), comprising: a master communication system (16 of fig. 6) provided by said portable telephone and having a first short-range radio communication module (74 of fig. 6) and a first control section (72 of fig. 6; col. 3, lines 50-61; col. 4, lines 43-45) and a slave communication system (46 of fig. 6) having a second short-range radio communication module (54 of fig. 6; col. 3, lines 34-44; col. 4, lines 43-45), wherein said first control section (72 of fig. 6) transmits a warning sound signal to the slave communication system (46 of fig. 6) to generate a specified warning sound (81 of fig. 6, step 108 of fig. 7, step 204 of

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fig. 11) when said first control section (72 of fig. 6) determines a distance (46 of fig. 6; figs. 8-11; col. 1, lines 41-57; col. 3, line 62- col. 4, line 21; col. 4, line 43- col. 5, line 17; col. 7, lines 11-24).

However, Barrett et al does not specifically disclose the feature of a control section that determines the distance between the master communication system and the slave communication system, which is greater than a predetermined range. Also a wearable earphone, which includes a speaker and a microphone to facilitate hands-free communication.

On the other hand, McCarthy, from the same field of endeavor, discloses a cordless telephone having a handset and a base unit. The signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29- 53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is considered that the control section determines a distance between the master communication system and the slave communication system.

Rydbeck also discloses a radiotelephone including a multifunctional headset that operates in two different modes. In the first mode, the headset may be mounted on a radiotelephone body where it serves as a speaker and microphone for the radiotelephone. Furthermore, the headset can be separated from the body of the portable radiotelephone and placed on the head of the user. In this mode of operation, the headset receives and transmits signals from and to the radiotelephone

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body during a call, thus providing hands-free operation. The headset can be attached to a user's head by an ear clip. The headset and body may include low power RF transceivers. The headset may contain power saving circuitry to minimize power drain from an internal battery (figs. 2-4, 7; col. 1, line 46- col. 2, line 18). In addition, the user may easily remove the headset from his or her head by simply lifting the ear clip portion of the headset above the ear. Furthermore, the headset can communicate with the radiotelephone body over only short distances, for example, a few meters (figs. 4 and 7; col. 3, lines 28- 63; col. 8, lines 12- 48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Rydbeck to the modified system of McCarthy and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 3, Barrett et al as applied to claim 1 above differ from claim 3 in the present invention in that, Barrett does not specifically disclose the feature of control section that determines the distance between the master communication system and the slave communication system which is greater than said predetermined range.

However, McCarthy discloses a cordless telephone having a handset and a base unit. The signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29- 53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is

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considered that the control section determines a distance between the master communication system and the slave communication system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Rydbeck and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 5, Barrett et al discloses a control method for preventing the loss of a portable telephone (figs. 6-7; col. 1, lines 6-27), the method comprising the steps of: determining (72 of fig. 6) whether a calling state exists between the portable telephone and the earphone (col. 4, lines 29-45; col. 7, lines 10-34); transmitting (72 of fig. 6) a warning sound signal to the earphone and the calling state between the portable telephone and the earphone is detected (the belt clip proximity unit 46 contains a transceiver 54 with means which can be worn or carried by a user, such as a hearing aid, etc, therefore, it is considered as earphone; see col. 2, lines 2-6; col. 4, lines 24- 41; col. 4, line 47- col. 5, line 12; col. 7, lines 29 - 41) ; and generating (52 of fig. 6) a warning sound in the earphone if the warning sound signal is received from the portable telephone (col. 4, line 43- col. 5, line 17; col. 5, lines 31-60).

However, Barrett et al does not specifically disclose the step of periodically measuring a power level of a radio frequency received from a short range communication module included in the earphone when a loss prevention mode is determined in the portable telephone; transmitting a warning sound signal to the short range communication module of the earphone if the power level of the radio frequency received from the earphone is below a predetermined level. Also an earphone, which includes a speaker, and a microphone that facilitate wireless operation of the portable telephone in a hands-free mode.

On the other hand, McCarthy, from the same field of endeavor, discloses a cordless telephone having a handset and a base unit. McCarthy teaches that the base unit measures the RF signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29- 53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status.

Rydbeck also discloses a radiotelephone including a multifunctional headset that operates in two different modes. In the first mode, the headset may be mounted on a radiotelephone body where it serves as a speaker and microphone for the radiotelephone. Furthermore, the headset can be separated from the body of the portable radiotelephone and placed on the head of the user. In this mode of operation, the headset receives and transmits signals from and to the radiotelephone body during a call, thus providing hands-free operation. The headset can be attached to a user's head by an ear clip. The headset and body may include low power RF transceivers. The headset may contain power saving circuitry to minimize power drain from an internal battery (figs. 2-4, 7; col. 1, line 46- col. 2, line 18). In addition, the user may easily remove the headset from his or her head by simply lifting the ear clip portion of the headset above the ear. Furthermore, the headset can communicate with the radiotelephone body over only short distances, for example, a

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few meters (figs. 4 and 7; col. 3, lines 28- 63; col. 8, lines 12- 48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Rydbeck to the modified system of McCarthy and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 6, Barrett et al as applied to claim 5 above differ from claim 6 in the present invention in that, Barrett does not specifically disclose the step of the portable telephone generating the warning sound if the power level of the radio frequency received from the earphone is below the predetermined level.

However, McCarthy discloses a cordless telephone having a handset and a base unit. In addition, McCarthy teaches that the base unit measures the RF signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29- 53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Rydbeck and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 7, Barrett et al as applied to claim 5 above differ from claim 7 in the present invention in that, Barrett does not specifically disclose the step of the portable telephone periodically measuring the power level of the radio frequency received from the earphone when a hands-free mode is determined in the portable telephone.

However, McCarthy discloses a cordless telephone having a handset and a base unit. In addition, McCarthy teaches that the base unit measures the RF signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29- 53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Rydbeck and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 9, Barrett et al as applied to claim 5 above differ from claim 9 in the present invention in that, Barrett does not specifically disclose the step of generating said warning signal, via said portable telephone, when the distance between the portable telephone

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and the earpiece is greater than a predetermined range and no radio communication exists there between

However, McCarthy discloses a cordless telephone having a handset and a base unit. The signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29- 53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is considered that the control section determines a distance between the master communication system and the slave communication system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Rydbeck and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 10, Barrett et al discloses an apparatus for preventing the loss of a portable telephone (figs. 6-7; col. 1, lines 6-27), comprising: a master communication system (16 of fig. 6; col. 4, lines 43- 49) provided by said portable telephone and having a short-range radio communication module (74 of fig. 6); and a slave communication system (46 of fig. 6) having another short-range radio communication module (54 of fig. 6; col. 3, lines 34- 44; col. 4, lines 43-45) which is different from the short-range radio communication module of the master so that the slave performs a blue tooth communication with the master (col. 6, lines 33-49); wherein if it

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is detected that the master transmits a warning sound signal to the slave to generate a specified warning sound (figs. 8- 11; col. 4, line 43- col. 5, line 15; col. 5, lines 31-51; col. 7, lines 11-24).

However, Barrett et al does not specifically disclose the step of detecting a distance between the master and the slave that is greater than a predetermined range. Also a wearable earphone, which includes a speaker and a microphone to facilitate hands-free communication.

On the other hand, McCarthy, from the same field of endeavor, discloses a cordless telephone having a handset and a base unit. McCarthy teaches that the base unit measures the RF signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29- 53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is considered that the control section determines a distance between the master communication system and the slave communication system.

Rydbeck also discloses a radiotelephone including a multifunctional headset that operates in two different modes. In the first mode, the headset may be mounted on a radiotelephone body where it serves as a speaker and microphone for the radiotelephone. Furthermore, the headset can be separated from the body of the portable radiotelephone and placed on the head of the user. In

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this mode of operation, the headset receives and transmits signals from and to the radiotelephone body during a call, thus providing hands-free operation. The headset can be attached to a user's head by an ear clip. The headset and body may include low power RF transceivers. The headset may contain power saving circuitry to minimize power drain from an internal battery (figs. 2-4, 7; col. 1, line 46- col. 2, line 18). In addition, the user may easily remove the headset from his or her head by simply lifting the ear clip portion of the headset above the ear. Furthermore, the headset can communicate with the radiotelephone body over only short distances, for example, a few meters (figs. 4 and 7; col. 3, lines 28- 63; col. 8, lines 12- 48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Rydbeck to the modified system of McCarthy and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Claims 4, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al (US Patent No 5943628) in view of McCarthy (US Patent No 5373548) and Rydbeck (US Patent No 5590417) as applied to claims 1 and 5 above, and further in view of Novakov (US Patent No 6650871 B1).

Regarding claims 4 and 8, Barrett, McCarthy and Rydbeck disclose everything claimed as explained above except the feature of a BLUETOOTH communication protocol.

However, Novakov shows in figure 1, a first wireless Pico net 150 that comprises one or more conventional Pico net enabled devices 110-114, as well as a Pico net enabled cordless telephone base unit 100a. The Pico net devices 100a, 110, 112 and 114 all communicate with one another based on known Pico net techniques using Bluetooth protocols. Similarly, Pico net devices 100b, 120, 122 and 124 all communicate with one another using compatible Pico net

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techniques using Bluetooth protocols (col. 3, line 28- col. 4, line 50; col. 6, lines 11-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Novakov to the modified system of Rydbeck, McCarthy and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 3-10 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's representative argues that the slave communication system is located in an earphone and a short- range communication module in the earphone.

Rydbeck discloses a headset that can be attached to a user's head by an ear clip. Note that the headset is considered as the slave communication system. Furthermore, the user may easily remove the headset from his or her head by simply lifting the ear clip portion of the headset above the ear. The headset can communicate with the radiotelephone body over only short distances, for example, a few meters, which are short-range communication as claimed (figs. 4 and 7; col. 3, lines 28- 63; col. 8, lines 12- 48).

Barrett also discloses short range wireless link (see col.. 4, lines 42-49; col. 5, lines 3-12; col. 5, lines 29-50. More specifically, Barrett discloses "acceptable range" (col. 7, lines 55-57), "proximity" (col. 1, lines 41-55; col. 3, lines 38-41; col. 5, lines 50-67; col. 6, lines 1-12, "out of range" (col. 5, lines 3-12). These portions in Barrett clearly refer to short-range communication.

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Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MARCEAU MILORD

Marceau Milord

Examiner

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